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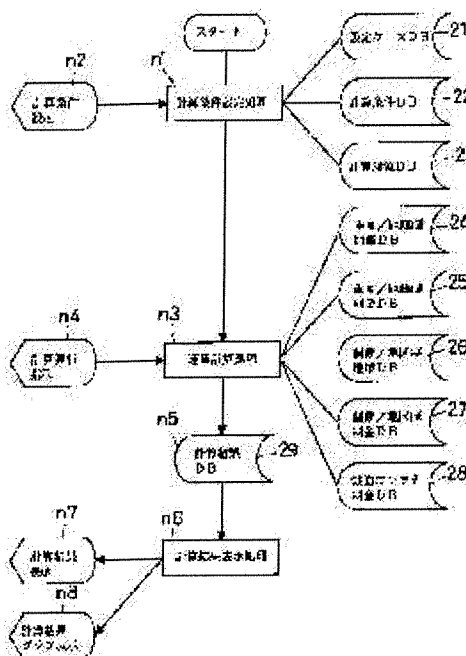
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(54) METHOD AND DEVICE FOR SELECTING TRANSPORTATION PATTERN AND  
RECORDING MEDIUM



(57)Abstract:

**PROBLEM TO BE SOLVED:** To easily select a transportation pattern being suitable for a shipment condition by calculating the transportation result of each transportation pattern from a prescribed table based on the input of article shipment information.

**SOLUTION:** In the case of truck transportation, for example, a case number, a data number and data of a shipment place are stored in a setting case DB 21 as an article shipment condition in a calculating condition setting processing n1 and a consecutive number, an arrival place, a number of articles and its weight are set in a calculation object DB 23. Moreover, a

transportation businessman number is set and attribute data of a transportation system corresponding to the transportation businessman number is set in the calculating condition DB 22. Then a transportation distance and charge are calculated through the use of the respective tables of a weight/distance system distance DB 24, a charge DB 25, a number/district system distance DB 26, a charge DB 27 and a railroad container charge DB 28 based on the setting contents of DB 21-23 in a freight calculation processing n3 so that it is stored in a calculation result DB 29. Then calculation result data are displayed by a chart or a graph in a calculation result display processing n6.

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DETAILED DESCRIPTION

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[Detailed Description of the Invention]

[0001]

[The technical field to which invention belongs] This invention relates to a record medium from the shipping agent who has more than one at the transportation pattern election approach with easy election of the shipping agent who suited most the conditions of shipment, such as a fare or business time amount of transportation, and its equipment list, for example.

[0002]

[Description of the Prior Art] For example, in the contractor who produces goods, if there are many volumes, this production article will once be kept in a warehouse, delivery shipment will be carried out from this warehouse at a vendor, and this delivery shipment will be left to a shipping agent.

[0003] An above-mentioned shipping agent has many contractors from whom transportation means (an automobile, a railroad, a ship, airplane, etc.) and a freight system differ, for example, it is a truck line \*\*\*\* doubling fare (route fare).

Truck line charter fare (area fare)

It is a truck line parcel delivery service freight railroad transportation container fare, and the shipping agent from whom a fare and a duration differ also in the contractor of the same freight system exists.

[0004] Therefore, in leaving delivery of goods to a shipping agent, if shipment conditions and a metaphor can perform election of the contractor who suited a cheap fare or quick delivery, the effective shipment delivery of them will be attained.

[0005]

[Problem(s) to be Solved by the Invention] This invention aims at offer of a record medium in the transportation pattern election approach which the transportation pattern which suited shipment conditions can elect easily, and its equipment list.

[0006]

[Means for Solving the Problem] The weight of the goods which transport invention of this invention according to claim 1, transportation distance, It has as a table two or more patterns of the transportation pattern with which the transportation system of a proper was set up to transportation of goods in the combination of the predetermined item set up according to items, such as the goods number, a transportation area, freight gold, and a duration of transportation. Based on the input of the shipment information on the goods by the combination of the predetermined item set up according to items, such as a dispatch ground of goods, an arrival ground, a fare, and a duration of transportation, the transportation result of each transportation pattern is computed from the above-mentioned table. It is characterized by being the transportation pattern election approach which outputs the combination of the transportation pattern which suits the shipment conditions of goods most, or two or more transportation patterns.

[0007] The weight of the goods which transport invention of this invention according to claim 2, transportation distance, The table which memorized two or more patterns of the transportation pattern with which the transportation system of a proper was set up to transportation of goods in the combination of the predetermined item set up according to items, such as the goods number, a transportation area, freight gold, and a duration of transportation, An input means to input the shipment information on the goods by the combination of the predetermined item set up according to items, such as a dispatch ground of goods, an arrival ground, a fare, and a duration of transportation, An operation means to compute the transportation result of each transportation pattern from said table based on the shipment information on the goods inputted from the above-mentioned input means, It is characterized by being transportation pattern election equipment equipped with an output means to output the combination of the transportation pattern which suits the shipment conditions of goods most from the result of an operation of the above-mentioned operation means, or two or more transportation patterns. Invention of this invention according to claim 3 is characterized by being the transportation pattern election approach of having set said transportation system as the fare or/and the duration, or its equipment to compensate for the configuration of invention above-mentioned claim 1 or given in two.

[0008] Invention of this invention according to claim 4 is characterized by being the transportation pattern election approach of performing each processing by computer, or its equipment to compensate for the configuration of above-mentioned claims 1 and 2 or invention of three.

[0009] The weight of the goods which transport invention of this invention according to

claim 5, transportation distance, The table which recorded two or more patterns of the transportation pattern with which the transportation system of a proper was set up to transportation of goods in the combination of the predetermined item set up according to items, such as the goods number, a transportation area, freight gold, and a duration of transportation, Based on the input of the shipment conditions of the goods by the combination of the predetermined item set up according to items, such as a dispatch ground of goods, an arrival ground, a fare, and a duration of transportation, the transportation result of each transportation pattern is computed from the above-mentioned table. It is characterized by being the transportation pattern election processing information record medium which recorded the processing program which outputs the combination of the transportation pattern which suits the shipment conditions of goods most, or two or more transportation patterns.

[0010]

[Function and Effect of the Invention] According to this invention, each shipping agent from whom a freight system, a freight unit price, or the duration of transportation differs to transportation of goods Catch as a transportation pattern which analyzed in items, such as the weight of the goods to transport, transportation distance, the goods number, a transportation area, freight gold, and a duration of transportation, and set up the transportation system of a proper, and it registers (it memorizes as a table). It is contingent [ on being / which it is the cheap transportation pattern of a fare besides the shipment conditions of goods, for example, the dispatch ground, and the arrival ground, or the duration of transportation / short (transportation being quick) ]. The transportation result of each transportation pattern is computed. From the calculation result [ cheap, shipment conditions, for example, a fare, ] Or the shipping agent who suits the shipment conditions of goods most can be easily elected by outputting the transportation pattern of the short (transportation is quick) transportation system of a duration, or the combination of the transportation pattern.

[0011] Moreover, if it is made the processing word which can process an above-mentioned processing program by computer and being stored in record media, such as CD-ROM and a floppy disk, for example, it will install in a personal computer, processing with this personal computer can be performed, and a shipping agent's selection can be performed simply.

[0012]

[Example] One example of this invention is explained in full detail based on a drawing below. The drawing showed the example which constituted transportation pattern election equipment from a personal computer (it outlines Following PC), and in drawing

1 , PC10 was equipped with the body 11, the display 12, the keyboard 13, and the mouse 14, and has connected the printer 15 to a body 11.

[0013] And the table and processing program which are explained to the following required for transportation pattern election processing are recorded on CD-ROM16, and are installed on the hard disk (illustration abbreviation) with which the interior of the body 11 of PC was equipped through this CD-ROM16. In addition, it is also possible to replace with CD-ROM16 and to use a floppy disk and other record media.

[0014] Drawing 2 shows various kinds of tables required for transportation pattern election processing, and these tables are memorized in the predetermined area where the hard disk was set up.

[0015] The setting case DB(it is the same brief sketch [ of a database ] and the following) 21, the count conditions DB22, and the candidate DB23 for count are databases (or table) which memorize the shipment conditions of the set-up goods, and are inputted by a keyboard 13 or the mouse 14 from a screen.

[0016] Since the contents of transportation change with contractors when the setting data of a case number, a data number, and the dispatch ground are memorized and a case number transports goods, the setting case DB21 sets up the different transportation case (example) beforehand, and is the number given for the setup of every. The classification of a specific number and the goods of shipment whose data number divides roughly a shipment request (for example, request Lord) is specified by the consecutive numbers mentioned later. The dispatch ground is data of the dispatch ground when transporting goods, for example, expresses with the code according to all prefectures, a zip code, etc.

[0017] The above-mentioned candidate DB23 for count can set up a data number and consecutive numbers, and a data number will be a particular number which divides the above-mentioned shipment request roughly, consecutive numbers are the numbers set as the goods shipped in a shipment request by the data number, and if a data number is set up, consecutive numbers will be given automatically.

[0018] Moreover, for [ this / DB23 ] count, the arrival ground (it is data of the arrival ground when transporting goods, for example, expresses with the code according to all prefectures, a zip code, etc.), the number, and weight (number of transportation goods and data of AUW) are set up and memorized.

[0019] The above-mentioned count conditions DB22 are established for every case number, a case number and a shipping agent number can be set up, and the transportation case (example) of the above-mentioned [ a case number ] and shipping agent \*\*\*\*\* set up a transportation system.

[0020] That is, count of distance differs from count of a tariff for every shipping agent, and, moreover, at least one shipping agent may be preparing two or more count approaches. Therefore, a shipping agent number will set up a transportation system (freight system in this case), and that shipping agent's transportation conditions are memorized. For example, they are the following conditions.

[0021] a shipping agent name (the route which the shipping agent corresponding to a shipping agent number has adopted --) Freight system names, such as delivery and an area (area) charter, distance / area pointer (data in which have two or more classes for computing distance or an area, and one of them is shown), A tariff pointer (data in which have two or more classes for a tariff to compute, and one of them is shown), weight (the upper limit of the goods to deal with, minimum), the number (the upper limit of the goods to deal with, minimum), collection-and-delivery distance, a junction partition (in this transportation case) When there is relay, they are the data of the partition, a winter premium partition, a ferry partition (partition which uses a ferry), a tariff latch (data of the rate of credit in case there is discount or a premium), distance (an upper limit, minimum), and the count approach.

[0022] Therefore, since every shipping agent and at least one shipping agent may have two or more these transportation conditions, DB is prepared for a case number and a shipping agent number for every transportation conditions, respectively.

[0023] The following class is set to count of a fare.

1) The weight / distance system 2 calculated based on the weight and distance of goods  
The number / district system 3 calculated based on the area of the number of goods  
Container of railroad transportation.

[0024] At above-mentioned weight / distance system, there are the calculation criteria and tariff calculation criteria of distance which are adopted under the system of this, and the distance DB24 of the above-mentioned weight / distance system and the tariff DB25 of weight / distance system set these up. Moreover, on the number/district system, there are the calculation criteria and tariff calculation criteria of distance which are adopted under the system of this, and the distance DB26 of the above-mentioned number/district system and the tariff DB27 of the number/district system set these up. Moreover, the railroad container tariff DB28 has set up the tariff in case a railroad container conveys goods. And these DBs 24, 25, 26, 27, and 28 are prepared for every shipping agent.

[0025] The distance DB24 of the above-mentioned weight / distance system has set up the data of the dispatch ground, an express company, and the arrival ground. Further as detail data Distance (distance between [ the dispatch ground to ] arrival grounds),

collection-and-delivery distance (collection-and-delivery distance in the dispatch ground and the arrival ground), A junction partition, a winter premium partition, a ferry partition, distance +alpha (coordination distance of the dispatch ground and the arrival ground), an area premium partition (partition with the need of breaking distance geographically), a delivery area partition (partition which requires delivery), and duration (time amount require to transportation) \*\* are set up. The tariff DB25 of the above-mentioned weight / distance system has set up the matter of the tariff corresponding to the fiscal year, distance, and weight which show the tariff structure.

[0026] The distance DB26 of the above-mentioned number/district system has also set up the data of the dispatch ground, an express company, and the arrival ground, and has set up the data in the area corresponding to the dispatch ground and the arrival ground, and a duration further.

[0027] Moreover, the tariff DB27 of the number/district system has also set up the data of the number of goods, weight, and a duration other than the data of the dispatch ground, an express company, and the arrival ground, and has set up further the data of a tariff made equivalent to these setting data.

[0028] The fare of the container of railroad transportation mentioned above was computed at the charge of dispatch, the charge of a railroad, and the charge of arrival, the charge of a railroad became a rail fare between arrival stations from the departure station, and the railroad container tariff DB28 has set up the following matter so that these count may be possible. Namely, arrival station conversion (it changes into the arrival station code of the arrival ground), an arrival station activity (the charge of collection and delivery, the charge of a winter premium, etc. are set up), container distance, the Cong Teng tariff, a duration.

[0029] Predetermined shipment conditions are inputted, and since a count result that the fare was calculated based on this input is outputted as an election output of a transportation pattern, the count result DB29 memorizes a need matter. and a case number, a shipping agent number, a data number, and consecutive numbers set up this count result DB29 -- having -- further -- as detail data -- a count result (the case which was most suitable when it calculated in some transportation cases (example) -- for example) When a duration is quick (short), and these both are good, flag, adaptation partition, basic fare (neither surcharge nor discount rate is included), sum total fare (many tariffs are added together), and duration \*\* is set [ when a fare is cheap, or ] up.

[0030] Thus, the constituted transportation pattern election equipment explains processing actuation of PC10 which elects the optimal transportation pattern of a fare with reference to the flow chart of drawing 3 . For example, it shall convey to



transportation using a truck. In order to perform count conditioning processing (step n1) required for this transportation, the shipment conditions of transportation of goods are inputted from the screen of a display 12 using a keyboard 13 or a mouse 14 (step n2).

[0031] The shipment conditions to input are a case number.

Data number

It is the quantity of the number transportation goods of dispatch ground arrival ground transportation goods.

[0032] the setting case DB21 shown in drawing 4 when the data of a case number, a data number, and the dispatch ground are inputted -- a case number "1" -- the data number "1" dispatch ground "27000" (the code number according to all prefectures, or zip code)

It fears the account of \*\*.

[0033] moreover, the thing for which a data number is set to the candidate DB23 for count shown in drawing 5 -- consecutive numbers -- "1-1" arrival ground "12000" (the code number according to all prefectures, or zip code)

Number "3" weight "15" (AUW, Unit kg)

\*\* -- it is set up like. In addition, consecutive numbers are automatically given by a data number being set up.

[0034] Next, it is a shipping agent number as shipment conditions to input.

It inputs. This shipping agent number sets up a contractor's freight system (since a shipping agent adopts a freight system, it becomes an express company name as a result), and is 1. route 1 (when there are more than one also for that system with a route fare, it identifies by the number).

2. Delivery 1 (when There are More Than One Also for the System with Delivery Fare, it Identifies by Number)

3. Area 1 (when There are More Than One Also for the System with Area Fare, it Identifies by Number)

4. Charter 1 (when There are More Than One Also for the System with Charter Fare, it Identifies by Number)

If it comes out, and it is and these are set up, on the count conditions DB22 shown in drawing 6 If a setup of the attribute data (each item of many count conditions) of the freight system corresponding to this shipping agent number is permitted and this attribute data is installed beforehand The set up contents are displayed, and if undecided, according to the contents of notification from a contractor, it will input with a keyboard 13 or a mouse 14 in the pictures, and count conditions will be set up.

[0035] In addition, in a case number "1", a setup of the count conditions shown by

drawing 6 chose the shipping agent numbers 1-4, and has set up a route 1, delivery 1, an area (area) 1, and four examples of a charter 1.

[0036] After a setup of count conditions is completed as mentioned above, it shifts to freight computation next (step n3). Directions of this freight computation are inputted from the screen of a display 12 (step n4).

[0037] In this freight computation, CPU of PC10 performs freight computation (data processing) in accordance with a program using each table of the distance DB24 of weight / distance system, the tariff DB25 of weight / distance system, the distance DB26 of the number/district system, the tariff DB27 of the number/district system, and the railroad container tariff DB28 based on the contents of a setting of DB 21, 22, and 23 which set up each count conditions.

[0038] It is 1 as mentioned above for the freight system in above-mentioned freight computation. The weight / distance system 2 calculated based on the weight and distance of goods The number / district system 3 calculated based on the area of the number of goods There is a container of railroad transportation and these assignment is judged by setup of the count approach of the count conditions DB22.

[0039] When weight / distance system is set up, the table of weight / distance system distance DB24, and the weight / distance system tariff DB25 is used. When the tariff by transportation distance and this distance is computed and the number/district system is set up When the tariff by transportation distance and this distance is computed and the container of railroad transportation is set up using the number / district system distance DB26, and the number / district system tariff DB27, the tariff by transportation distance and this distance is computed using the railroad container tariff DB28.

[0040] Since, as for this count result, a route 1, delivery 1, an area (area) 1, and four examples of a charter 1 are set up by choosing the shipping agent numbers 1-4 in a case number "1" after above-mentioned freight computation is completed, as shown in drawing 7, it memorizes to the count result DB29 for every example of that (step n5).

[0041] In the above-mentioned count result, among four examples, by the shipping agent 1, since the sum total fare is the cheapest for 1130 yen, the flag of "1" is set to a count result and the fare shows the cheapest (the optimal) thing. In addition, modification \*\*\*\* of that is good for a duration at the case where a duration chooses the quickest (short) contractor, from a fare in a selection setup. In this case, the duration of a supplier number 2 is 13 hours, and since the duration shows the quickest (the optimal) thing, the flag of "1" will be set to this shipping agent's 2 count result.

[0042] Subsequently, count result display processing is performed (step n6), and this

processing displays the count result data memorized by the above-mentioned count result DB29 on a display 12 in (step n7) or a graph diagrammatically, respectively (step n8). Moreover, it can also print out by the printer 15.

[0043] by displaying a count result as mentioned above, "1" is stood to the flag of the count result in the indicative data -- \*\*\*\* -- it is detectable that it is the fare for which the shipping agent was most suitable.

[0044] As explained above, according to this example, the shipping agent of the fare which suits the shipment conditions of goods most can be easily elected by checking the flag "1" of a count result.

[0045] In addition, although a shipping agent's freight system was caught as one transportation pattern and elected in this invention, the transportation pattern which can elect the speed (transportation is short) of the duration of transportation as a transportation pattern, and suits the shipment conditions of goods most by compound of these fares and a duration can also be elected.

[0046] Moreover, what a route contractor is used for transportation and uses [ the middle ] a delivery contractor for after that is possible, and if it is the case where transportation time amount is shortened, since such a transportation approach will also be born, a transportation pattern does not restrict consisting of single contractors, but also has two or more contractors' combination.

[0047] In addition, although transportation pattern election equipment is constituted from an example using PC10, it can also constitute from a control unit only for [ this ] equipment, and this invention including other configurations is not limited to an example, and it comes out to apply to a claim along with the technical thought of a publication.

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[Translation done.]

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CLAIMS

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[Claim(s)]

[Claim 1] It has two or more patterns of the transportation pattern with which the transportation system of a proper was set up to transportation of goods in the combination of the predetermined item set up according to items, such as the weight of the goods to transport, transportation distance, the goods number, a transportation area, freight gold, and a duration of transportation, as a table. The dispatch ground of goods, the arrival ground, a fare, Based on the input of the shipment conditions of the goods by the combination of the predetermined item set up according to items, such as a duration of transportation, the transportation result of each transportation pattern is computed from the above-mentioned table. The transportation pattern election approach which outputs the combination of the transportation pattern which suits the shipment conditions of goods most, or two or more transportation patterns.

[Claim 2] The table which memorized two or more patterns of the transportation pattern with which the transportation system of a proper was set up to transportation of goods in the combination of the predetermined item set up according to items, such as the weight of the goods to transport, transportation distance, the goods number, a transportation area, freight gold, and a duration of transportation, the dispatch ground of goods, the arrival ground, a fare, An input means to input the shipment conditions of the goods by the combination of the predetermined item set up according to items, such as a duration of transportation, An operation means to compute the transportation result of each transportation pattern from said table based on the shipment conditions of the goods inputted from the above-mentioned input means, Transportation pattern election equipment equipped with an output means to output the combination of the transportation pattern which suits the shipment conditions of goods most from the result of an operation of the above-mentioned operation means, or two or more transportation patterns.

[Claim 3] The transportation pattern election approach according to claim 1 or 2 of having set said transportation system as the fare or/and the duration, or its equipment.

[Claim 4] The transportation pattern election approach according to claim 1, 2, or 3 of performing each processing by computer, or its equipment.

[Claim 5] The table which recorded two or more patterns of the transportation pattern with which the transportation system of a proper was set up to transportation of goods in the combination of the predetermined item set up according to items, such as the weight of the goods to transport, transportation distance, the goods number, a transportation area, freight gold, and a duration of transportation, the dispatch ground of goods, the arrival ground, a fare, Based on the input of the shipment conditions of the goods by the combination of the predetermined item set up according to items, such as a duration of transportation, the transportation result of each transportation pattern is computed from the above-mentioned table. The transportation pattern election processing information record medium which recorded the processing program which outputs the combination of the transportation pattern which suits the shipment conditions of goods most, or two or more transportation patterns.

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